

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

| | | |
|---|---|---------------------------------------|
| In re Application of: Michael D. Zoeckler |) | Examiner: Harmon, Christopher R. |
| |) | |
| Serial No.: 09/559,704 |) | Art Unit: 3721 |
| |) | |
| Filed: April 27, 2000 |) | Attorney Docket No.: 7137 (R029 1056) |
| |) | |
| For: PAPERBOARD CARTONS WITH |) | |
| LAMINATED REINFORCING RIBBONS |) | |
| AND METHOD OF MAKING SAME |) | |
| |) | |
| Appeal No.: 2006-0532 |) | |
| |) | |

REPLY BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §41.41, Appellant submits this Reply Brief in response to the Examiner's Answer mailed October 6, 2006.

Each of the grounds of rejection involved in this appeal will be discussed in turn.

**1. Claims 1-3, 11-16, 25-29 And 34, Rejected Under 35 U.S.C. §102(b) As Anticipated
By Stone**

On page 3 of the Answer, the Examiner states that Stone discloses "progressively applying, with an adhesive, at least one ribbon of reinforcing material 38 with a width less than the paperboard substantially overlying a selected panel portion (56)"; likewise, on page 5, the Examiner states that "Stone discloses reinforcing substantially all of panel portion 56 by adhering the strip 38

(see figures 2 and 3). . . . Thus the overlying material of Stone adheres to substantially all of a selected panel portion 56 and anticipates the limitation.” It appears from these statements that the Examiner has misconstrued the language of the claims, the disclosure of the Stone patent, or both, and this misconception has led him to conclude erroneously that Stone anticipates the claimed invention. This becomes clear when, for example, independent claim 25 is compared to the disclosure of Stone.

Step (a) of claim 25 recites:

(a) advancing a web of noncorrugated paperboard along a path, the web of paperboard having a width and longitudinally extending panel portions that will become panels separated by fold lines in completed carton blanks;

In Fig. 3, Stone discloses advancing a web 42 of noncorrugated paperboard. The web has panel portions that will become panels separated by fold (or score) lines in completed carton blanks. Thus, as shown in Fig. 3 of Stone, the panel portions separated by fold lines that will become panels in the completed carton blank are panel portions 16, 18, 20 and 22. These panel portions are separated by fold lines 48, and are further defined by the longitudinal fold lines separating them from flaps 12A to D and 14A to D (see col. 5, lines 7 to 35).

Although the Examiner apparently has construed the claim term “panel portion” to mean any portion of a panel, this interpretation is contrary to the language of step (a), which recites that the panel portions “will become panels separated by fold lines in completed carton blanks.” (emphasis added). This requirement that the panel portions “become” panels means that the panel portions correspond to, and are coextensive with, the panels in the completed carton blanks, rather than being only portions of such panels. Accordingly, in Stone, each panel portion 16, 18, 20, 22 becomes (corresponds to) a panel of the carton blank.

Step (b) of claim 25 reads:

(b) laminating a ribbon of reinforcing material to the advancing web of noncorrugated paperboard, the ribbon having a width less than the width of the web of noncorrugated paperboard and being positioned on, and adhered to, substantially all of a longitudinally extending panel portion of the web of noncorrugated paperboard;

As disclosed in Stone, ribbon 38 is adhered to the web 42. It has a width less than web 42, and as shown in Fig. 3, is positioned on, and adhered to the panel portions 16, 18, 20 and 22 of the web (ribbon 38 is designated as collar blank 46 in Fig. 3, after having been scored and cut; see col. 4, line 67 to col. 5, line 6). Panel portion 56, to which the Examiner asserts ribbon 38 is adhered, is not a panel portion of the web as defined by claim 25; rather, panel portion 56 is one of the panels that constitute collar blank 46, as described at col. 5, lines 44 to 49 of Stone.

As shown in Fig. 3 of Stone, the ribbon 38 (collar blank 46) is considerably smaller than any of the panel portions 16, 18, 20 and 22 of the web to which it is adhered. Accordingly, it cannot reasonably be said to meet the limitation of claim 25 of “being positioned on, and adhered to, substantially all of” any of panel portions 16, 18, 20, or 22.

The Examiner attempts to address the inadequacies of collar blank 46 on page 6 of the Answer by asserting that Stone suggests that the strip 38 could be widened to substantially cover the whole panel portion. Even if it were clear to Appellant whether this suggestion is intended to form an additional basis of the anticipation rejection, Appellant does not find a clear disclosure in Stone of what the Examiner asserts. Nevertheless, even assuming for the sake of argument that Stone discloses that the ribbon 38/collar blank 46 could be made sufficiently wide to cover all of a panel portion, such as panel portion 20 for example, claim 25 would still not be anticipated, because it requires that the ribbon be adhered to substantially all of the panel portion. Stone fails to

teach such adhesion. In fact, Stone discloses that ribbon 38/collar blank 46 is only adhered to panel portion 20 in the area to the right (as seen in Fig. 3) of tear strip 27. The ribbon is not adhered to panel portion 20 at the tear strip nor in the area to the left of the tear strip (see col. 5, lines 3 to 6 and 36 to 40, also Figs. 1 and 4); if it were, Stone's flip-top box would be inoperative, as discussed in Appellant's Brief.

Thus, even if the ribbon 38/collar blank 46 were wide enough to cover all of panel portion 20, the ribbon would still not be adhered to "substantially all" of panel portion 20 because the areas of the ribbon under tear strip 27 and to the left of the tear strip (as seen in Fig. 3) would not, and could not, be adhered to panel portion 20.

The Examiner seems to, in effect, read the limitation "substantially all" out of the claim by asserting that "any portion of any panel that is adhered to and covered by another (reinforcing) layer could be reasonably selected" (Answer, page 5). This ignores the recitation in part (a) of claim 25 that the panel portions of the web "will become panels separated by fold lines." Thus, as discussed above, in Stone, since the panel portions of the web are the areas 16, 18, 20, 22, which become panels separated by fold lines, the ribbon 38/collar blank 46 would have to be positioned on, and adhered to, substantially all of at least one of these panel portions to anticipate the claim. However, as described above, the ribbon 38/collar blank 46 of Stone would not, and could not, be adhered to substantially all of the panel portions under and to the left of tear strip 27.

The term "substantially" means "approximately." Playtex Products, Inc. v. Procter & Gamble Co., 400 F.3d 901, 907, 73 USPQ2d 2010, 2015 (Fed. Cir. 2005). Although the Examiner emphasizes that the claim expression "substantially all of a selected panel portion of the web" is interpreted as being "extremely broad" (Answer, page 5), this expression is not so broad as to be readable on Stone. As discussed above, the "panel portions" recited in claim 25 are defined in step

(a) as those portions “that will become panels separated by fold lines in completed carton blanks; in Stone, these are panel portions 16, 18, 20 and 22. Even if Stone’s ribbon 38/collar blank 46 were formed wide enough to cover the entire width of panel portions 16, 18, 20 and 22, such ribbon 38/collar blank 46 would only be adhered to the areas of those panel portions which lie to the right of tear strip 27 (as seen in Fig. 3). To state that adhesion of the ribbon 38/collar blank 46 to those areas under and to the right of tear strip 27 would constitute adhesion to “substantially all” of the panel portions 16, 18, 20 and 22 is simply not a reasonable interpretation of the claim language.¹

Step (c) of claim 25 is:

(c) cutting the web of noncorrugated paperboard and laminated ribbon across their length into carton blanks having panels, the laminated ribbon reinforcing at least one panel of each of the carton blanks.

This step further indicates that when the web is cut into carton blanks, the “panel portions” recited in step (a) (and referred to in step (b)) have become panels of the completed carton blanks, thus corresponding to panels 16, 18, 20 and 22 in the completed carton blank shown in Stone’s Fig. 3. Appellant incorporates all other comments in this and other regards from all other briefing included in this application.

While the above discussion has been limited to claim 25 for the sake of simplicity, it will be recognized that it is equally applicable to independent claim 1, which distinguishes over Stone in a manner analogous to claim 25.

Accordingly, it is submitted that independent claims 1 and 25 are not anticipated by Stone, and the rejection of those claims, along with the rejection of dependent claims 2, 3, 11-16, 26-29 and 34 should be reversed.

¹ From a measurement of Stone’s Fig. 3, the adhered area of the widened strip 38 would be only about 80% or less of the total area of panel portion 16, 18, 20 or 22.

2. **Claims 4-7 And 30-33, Rejected Under 35 U.S.C. §103(a) As Unpatentable Over**
Stone In View Of Stokes

The Examiner states at page 7 of the Answer that:

Laminating with multiple laminates is well established and generally available as is specifically taught by Stokes. If a container thus required further strengthening or reinforcement, one of ordinary skill in the art could easily conclude to apply multiple laminates.

For the reasons stated in the Appeal Brief, Appellant does not agree that it would have been obvious to combine Stone and Stokes, nor that the resulting combination would render the claims obvious.

Stokes applies ribbons of material t to a web of carton material being fed from roll R. These ribbons are not applied everywhere across the web, but rather are shown as being applied over the score lines in the web. As shown in Fig. 2 and described on page 1, lines 85 to 95, when the side panels S of the carton blank C are bent along the score lines, the ribbons t reinforce the corners. Therefore, even if the teaching of Stokes were applied to Stone, ribbons t would be applied along the score line between Stone's panels 16, 18, 20, 22 and flaps 14A, B, C, D.

Accordingly, even if one assumes that it would have been obvious to apply the teachings of Stokes to the method of Stone, the thus-modified method still would not meet all the limitations of the claims because neither the original ribbon nor the additional ribbon or ribbons would be positioned to overlie and adhere to substantially all of a panel portion, as called for by the claims. Instead, any additional ribbon would merely run along a score line between two panel portions, with the ribbon overlying and adhering to parts of the panel portions on each side of the score line. Accordingly, Stokes fails to make up for the inadequacies of Stone and the rejection based thereon should be reversed.

3. **Claims 1, 3-5, 7, 9-11, 16, 25, 29-32 And 34, Rejected Under 35 U.S.C. § 103(a) As Unpatentable Over Lang In View Of Campbell et al.**

This rejection is extensively discussed on pages 17 to 21 of the Appeal Brief.

On pages 7 to 9 of the Answer, the Examiner indicates that “noncorrugated paperboard” is not an essential limitation to Appellant’s claimed invention. This is incorrect. The purpose of Appellant’s invention is to provide a viable alternative to micro-flute, a corrugated material developed as an alternative to the standard corrugated product disclosed by Lang. Thus, as disclosed in the application: (a) micro-flute is more expensive than paperboard, and is not completely satisfactory for cartons (page 5, lines 4 to 18); (b) the invention comprises making paperboard cartons which have enhanced strength and rigidity similar to that of micro-flute (page 8, lines 13 to 17; page 10, lines 13 to 17); (c) paperboard cartons of the invention can be economically viable alternatives to micro-flute cartons (page 10, lines 17 to 20), have structural integrity comparable to micro-flute cartons (page 11, lines 12 to 16), and are economically competitive therewith (page 11, lines 16 to 20); and (d) paperboard cartons provided by the invention offer possibilities not obtainable with micro-flute (page 10, line 21, to page 11, line 7).

Merely because cartons may be made out of corrugated or noncorrugated board, that does not necessarily mean that it would automatically be obvious to apply a process described as being applicable to one type of board to another type of board, as the Examiner seems to assume. Here there is no suggestion, or even hint, in the entire Lang patent that the method disclosed therein could be applied to any material other than corrugated board. Also, the laminating material applied by Lang is not used for reinforcement, but rather to provide an attractive appearance (col. 8, lines 64 to 68), a printed layer (col. 9, lines 5 to 9), or a high quality finish layer (col. 9, lines 22 to 24), noting that applying paper as a laminate makes its lack of strength and ruggedness

irrelevant (col. 9, lines 41 to 50). Therefore, since Lang's laminating material is not applied to the corrugated board for the purpose of reinforcing it, one of ordinary skill would not derive from Campbell et al.'s disclosure of applying reinforcing material to corrugated or noncorrugated board a suggestion to apply the non-reinforcing material of Lang to noncorrugated board.

It should further be pointed out that since Lang's laminating material is not applied to the corrugated board for the purpose of reinforcing it, substituting noncorrugated board for corrugated board in the Lang process would not meet the requirement of Appellant's claims that a ribbon of "reinforcing material" be applied to the web. While it might be argued that any laminated material, even the thin material disclosed by Lang, would provide some minimal degree of reinforcement (see Lang, col. 10, lines 9 to 11), Appellant discloses that the reinforcing material must have "the physical and mechanical attributes necessary to provide the requisite reinforcing properties" (page 17, lines 9 to 11). This is in contradistinction to Lang's disclosure that the paper applied as a laminate lacks strength and ruggedness. There is no indication in Lang that the laminating material would have sufficient physical and mechanical attributes to reinforce noncorrugated paperboard.

Finally, Appellant notes that on page 9 of the Answer the Examiner states:

In view of this Campbell et al. (US 1,600,396) teaches corrugated paperboard and non-corrugated paperboard as well known alternatives for manufacturing containers in the art (see above) as well as many other cited references in the prosecution history ie. Anderson '117, Confer '538, Smith '702. (Emphasis added)

Appellant submits that the Examiner's reference to the Anderson, Confer and Smith references is improper, and is contrary to the Board's statement in the paragraph on pages 5 and 6 of the Remand to the Examiner dated March 24, 2006, to the effect that those references should be

included in the statement of the rejection if the Examiner relied on them to support the rejection.²

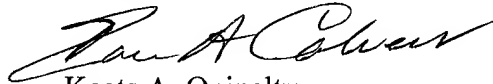
Appellant does not consider the claims to be unpatentable over Stone or Lang in view of any of these references, but since the Examiner did not include Anderson, Confer or Smith in the statement of the rejection, Appellant has not addressed them. However, Appellant respectfully requests that if the Board should decide that the present claims are unpatentable over one or more of these references, alone or in combination with other prior art, its decision be set forth as a new ground of rejection under 37 CFR §41.50(b).

Conclusion

For the reasons stated in the Appeal Brief and this Reply Brief, Appellant respectfully requests that each of the Examiner's rejections of appealed claims 1-7, 9-16 and 25-34 be reversed.

Nov. 6, 2006

Respectfully submitted,



Keats A. Quinalty

Reg. No. 46,426

Ian A. Calvert

Reg. No. 50,186

Attorneys for Appellant

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC

P.O. Box 7037

Atlanta, Georgia 30357-0037

(404) 879-2423 (Telephone)

(404) 879-2923 (Facsimile)

² Citing In re Hoch, 428 F.2d 1341, 1342, 166 USPQ 406, 407 (CCPA 1970).